



Factors Associated with Consistent Condom Use by Female Sex Workers with Their Non-Client Partners in Andhra Pradesh, India

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BACKGROUND

- India is dealing with an HIV epidemic, with over 5 million adults infected with HIV.
- Sex workers have been identified as a high risk group and have been targeted by interventions which promote condom use to prevent transmission.
- Condom use among female sex workers (FSW) is a complex behavior that differs widely by partner type, posing challenges for HIV prevention.

Of the 812 FSW, 35% of women did not always use a condom with regular clients in the last week, 31% did not always use condoms with an occasional client, 61% did not always use a condom with their temporary husband/lover and 92% did not always use a condom with their husband.

Women who said they had sex with a non-client partner in the last week (n=364) were younger, more educated, more likely to engage in home-based or highway-based sex work, and had more program exposure (receptive or active utilization versus no exposure to intervention) than women who had not had sex with a non-client partner.

Bivariate analysis showed that women who always used condoms with non-client partners tended to be younger, were more likely to be involved in home-based and agricultural-based sex work, and were less likely to be sterilized, to have experienced partner violence, and to have experienced STI symptoms in the last 6 months.

After adjustment through multivariate analysis, involvement in home-based sex work, highway-based sex work or multiple types of sex work were found to be factors significantly associated with consistent condom use with non-client partners. Sterilization, and having experienced STI symptoms in the last 6 months were correlated with not consistently using condoms with non-client partners.

Housing security (p = .07) and experiencing partner violence (p = .13) were found to be marginally significantly correlated with not consistently using condoms with non-client partners.

Table 1. Sociodemographic characteristics of 364 FSWs by consistent use of condoms with non-client partners (always/not always).

Characteristic	In the last 7 days did you always use a condom with your non-client partner (husband, temporary husband, or lover)?		p-value
	Always (N=93) Number (%)	Not Always (N=271) Number (%)	
Age			0.03*
18 to 25	32(34.4)	79(29.3)	
26 to 35	49(52.7)	124(45.9)	
36 to 45	10(10.8)	60(22.2)	
46 to 55	1(1.1)	6(2.2)	
46 to 70	1(1.1)	10(4)	
Able to Read or Write			0.95
Yes	23(24.7)	68(25.1)	
No	70(75.3)	203(74.9)	
Education			0.81
No Formal	48(51.6)	136(50.2)	
Some Formal	45(48.4)	135(49.8)	
Have you missed a meal in last 7 days? (food security)			0.51
Yes	61(65.6)	187(69.3)	
Can you stay in your current residence for the next year? (housing security)			0.07
Yes	65(69.9)	213(78.9)	
Any Contraceptive Method Currently Used			0.01
Sterilization	53(57.0)	193(71.22)	
No/Other	5(5.4)	23(8.1)	0.38
Hormonal Contraceptive	5(5.4)	7(2.6)	0.19*

* Fisher's Exact Test used when expected values were < 5

OBJECTIVE

To examine correlates of consistent condom use among female sex workers with their non-client partners, who were defined as husbands, temporary husbands or lovers.

METHODS

Analyzed data from a cross-sectional survey with 812 FSW in Andhra Pradesh, India using bivariate and multivariate analyses.

RESULTS



Table 2. HIV and STI related characteristics of 364 FSWs by consistent use of condoms with non-client partners (always/not always)

Characteristic	In the last 7 days did you always use a condom with your non-client partner (husband, temporary husband, or lover)?		p-value
	Always (N=93) Number (%)	Not Always (N=271) Number (%)	
Type of Sex Work (all that apply)			
Brothel Based	2(2.2)	15(5.5)	0.26*
Street Based	7(7.5)	35(12.9)	0.16
Lodge/Hotel Based	7(7.5)	25(9.2)	0.62
Home	35(37.6)	69(25.5)	0.03
Highway	17(18.3)	47(17.3)	0.84
Agricultural	6(6.5)	44(16.2)	0.02
Multiple	18(19.4)	35(13.0)	0.12
Frequency of Paid Vaginal Sex in the Last 7 Days			0.27
0 to 8	45(48.4)	149(55.0)	
8 or more	48(51.6)	124(45.0)	
Number of Clients in the Last 7 Days			0.29
1 to 6	43(47.3)	145(53.7)	
6 or more	48(52.8)	125(46.3)	
Knowledge of Diseases Spread Through Sexual Intercourse			0.75*
Yes	89(95.7)	261(96.7)	
HIV Knowledge			0.96
High	22(24.4)	65(25.1)	
Medium	36(40.0)	106(40.9)	
Low	33(35.6)	88(34.0)	
Program Exposure			0.21
No exposure	39(41.9)	142(52.4)	
Receptive	25(26.9)	62(22.9)	
Active/Utilization	29(31.2)	67(24.7)	
Experienced Non-Client Partner Violence (beating, rape, or threat with a weapon by husband or temporary husband/lover)			0.05
Yes	16(17.4)	75(27.8)	
Do you feel you are HIV infected?			0.35
Yes	16(17.6)	65(24.6)	
Ever Experienced STI Symptoms in Last 6 Months			0.025
Yes	29(31.2)	120(44.4)	
Continued to have sex with STI symptoms			0.26
Yes	15(17.7)	75(27.8)	
Heard about HIV/AIDS (prior to this interview)			1.00*
Yes	91(97.9)	764(97.4)	

* Fisher's Exact Test used when expected values were < 5

Table 3. Multivariate-adjusted Odds Ratios and 95% Confidence Intervals for Consistently Using Condoms with a Non-Client partner.

Characteristic	Odds Ratio	95% Confidence Interval
Home-based sex work	2.73	1.45 – 5.13
Highway-based sex work	2.17	1.04 – 4.54
Multiple sex work types	2.52	1.16 – 5.44
Sterilized	0.50	0.30 – 0.85
Experienced STI Symptoms in the last 6 months	0.58	0.34 – 0.98

CONCLUSIONS AND IMPLICATIONS

1. There is a high prevalence of inconsistent condom use with non-client partners including husbands and temporary husbands or lovers.

IMPLICATION: Women are at high risk for infecting or being infected by their non-client partners with HIV or other sexually transmitted diseases.

2. Sterilization was independently associated with inconsistent condom use with non-client partners (Table 3).

IMPLICATION: This is an important finding since sterilizations rates are particularly high in Andhra Pradesh and other regions of India. In non-client relationships, women may view condoms as a contraceptive method more than as protection against STIs or HIV.

3. Home-based, highway-based and multiple types of sex work was associated with consistent use of condoms with non-client partners (Table 3).

IMPLICATION: Since sex work categories are fairly ambiguous it is difficult to interpret this finding.

4. Women who reported having experienced STI symptoms in the last 6 months were more likely to have reported inconsistent condom use with their non-client partner.

IMPLICATION: Given that this is cross-sectional data we do not know if there is a causal relationship. It may be that women are experiencing symptoms because they use condoms inconsistently.

5. Bivariate analysis showed that women who did not use condoms consistently with their non-client partner experienced more violence from these partners than women who did use condoms consistently. Partner violence was only marginally significant when adjusted for in multivariate analysis.

IMPLICATION: Qualitative studies have shown that violence is a significant barrier to condom negotiation in domestic relationships in India, and our data now shows this quantitatively.